



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/822,092	04/09/2004	Jeffrey Brunet	DWW.P.US0003	2194
26360 7590 11/15/2007 RENNER KENNER GREIVE BOBAK TAYLOR & WEBER FIRST NATIONAL TOWER FOURTH FLOOR 106 S. MAIN STREET AKRON, OH 44308			EXAMINER FIGUEROA, MARISOL	
			ART UNIT 2617	PAPER NUMBER
			MAIL DATE 11/15/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/822,092	Applicant(s) BRUNET ET AL.	
	Examiner Marisol Figueroa	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 8/22/2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1-29 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-8, 10-20, 22, and 23** are rejected under 35 U.S.C. 103(a) as being unpatentable over RIGNELL et al. (US 2001/0053688 A1) in views of MARRAN (US 6,549,770 B1) and LAWRENCE (WO 98/38823).

Regarding claim 1, Rignell discloses a method of providing customer care within a mobile care framework (p.0084), comprising:

capturing device profile data over-the-air from a device agent (paragraphs [0102]-[0104]) within a mobile device (paragraphs [0024]-[0028], [0038]-[0049], [0077]-[0078], and [0080]; a support request message is generated by a mobile unit containing device profile data (e.g. unit settings/parameters, soft-, hard- and firmware modules, unit identification, etc.), and is transmitted over the air to a remote support location where the message is monitored and/or displayed to at least one service/support person),

the device profile data comprising user-specific and device-specific data (paragraphs [0038]-[0049]; the profile data contained in the support message comprises information

Art Unit: 2617

regarding the user (i.e., user-specific data) such as hardware/physical/functional units/modules that are or have been connected, model make, etc. (paragraphs [0048]-[0049]) and information regarding the device (i.e., device-specific data) such as at least one version number of software, hardware, firmware, etc. in the communications unit (paragraphs [0044] and [0047]));

correlating the device profile data to a database of known mobile device issues and associated solutions to the mobile device issues (paragraphs [0080]-[0082], [0091], and [0106]; the support location access one or more databases on the basis of the information received from the mobile device to generate a solution enabling the solving of the problems of the mobile unit; it is inherent to recognize that a correlating step is implicit because a solution for the problems is generated according to information included in the support request), to identify solutions for the mobile device issues given the user-specific and device-specific data given in the device profile data (paragraphs [0081]-[0082], and [0106]; the remote support location has means that generates support information for the solving of the mobile unit problems (i.e., solutions) on the basis of the information comprised in the support request message received from the mobile unit); and

selectively forwarding to the mobile device over-the-air at least one of the solutions for execution by the device agent (paragraphs [0081]-[0085], and [0093]; support information solving the problem(s) of the mobile unit is generated and provided to the mobile unit),

wherein the device agent is programmed to capture the device profile data (paragraph [0077]-[0078], and [0102]-[0103]; the mobile unit has means, i.e., microprocessor/device agent, which generates a support message containing the profile data, it is inherent that the microprocessor is programmed to capture the profile data of the mobile unit that is included in

Art Unit: 2617

the support request message) and execute the at least one solution on the mobile device (paragraphs [0031], [0081]-[0085], and [0093]; the mobile unit automatically updates its settings and parameters with the solution received from the remote support location; it is implied that a component in the device such as the microprocessor implements these new settings).

But, Rignell does not particularly disclose wherein a programmed analytics engine is used for identifying the solutions for the mobile device issues.

However, in the same field of endeavor, Marran teaches techniques for managing wireless digital communications subscriber's mobile, digital devices, such as digital cellular telephones by having a wireless digital communications network having the capability to download programming data over-the-air directly to a subscriber's mobile, and comprising an intelligent/expert system (i.e., analytics engine) with which the digital device communicates. The intelligent system processes complex inputs, discovers problems from the complex inputs, and formulates individualized solutions for discovered problems. Also, the intelligent system searches the wireless digital communications network for, and retrieves, the necessary data for solving the discovered problems and directly downloads the necessary data to the subscriber's mobile, digital device over-the-air (Abstract). This intelligent system improve prior art techniques for managing subscriber mobile, digital devices by downloading programming data to the devices intelligently, automatically, and on a device-by-device basis. The expert systems detects when a subscriber's digital telephone needs to be updated and decides what action to take, in order to automatically push downloads to subscriber's digital telephones, and combines a working memory with logic programming and a set of predetermined rules for triggering different programming actions (col. 4, line 16 – col. 5, lines 1-11; col. 7, lines 37-45; col. 8, line

Art Unit: 2617

29 – col. 9, lines 1-15). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, to modify Rignell to introduce (at the support location) an analytics engine programmed to identify solutions for the mobile device issues, as suggested by Marran, since such a modification would automate the procedure of maintaining digital telephones up to date given that the analytics engine (i.e., expert system) automatically pushes downloads to subscriber's digital telephone when needed, keep pace with current changes and constantly search for recognized events and decides what particular mobile devices require provisioning, repairs, etc. (col. 4, lines 15-19; col. 5, lines 31-45; col. 8, lines 29-35, 52-56), as a result mobile digital devices are more efficiently managed.

But, the combination of Rignell and Marran does not expressly disclose the step of matching the device profile data to a customer profile, the customer profile including a profile history.

However, Lawrence teaches a system for diagnosing a problem related to the use of a wireless communication device that matches device profile data to a customer profile, the customer profile including a profile history (pages 16-17; a customer service system retrieves the customer's complete record which typically contain account, service, and complaint history information, according to a subscriber number (i.e., profile information) and looks up information that leads to a resolution of the device problem). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, to modify the combination of Rignell and Marran to include the step of matching the device profile data to a customer profile, the customer profile including a profile history, as suggested by Lawrence,

since such a modification would provide the best appropriate solution that leads to the resolution of the device problems.

Regarding claim 2, the combination of Rignell, Marran, and Lawrence disclose the method of claim 1, in addition Rignell discloses wherein the capturing step comprises reading configuration data pertaining to the mobile device (paragraphs [0038]-[0039], and [0077]; e.g., settings/parameters, etc.).

Regarding claim 3, the combination of Rignell, Marran, and Lawrence disclose the method of claim 1, in addition Rignell discloses wherein the capturing step comprises reading resident applications in the mobile device (paragraphs [0038]-[0049], and [0077]; e.g. software, firmware in the mobile unit, hardware/physical/functional units installed in the mobile unit, etc.).

Regarding claim 4, the combination of Rignell, Marran, and Lawrence disclose the method of claim 1, in addition Rignell discloses wherein the capturing step comprises reading device profile data selected from the group consisting of configuration settings, resident applications, and diagnostic data (paragraphs [0038]-[0049], and [0077]).

Regarding claim 5, the combination of Rignell, Marran, and Lawrence disclose the method of claim 4, in addition Rignell discloses wherein the diagnostic data comprises diagnostic data selected from the group consisting of make and model of the device, total and available memory, total and available storage, battery life, connection strength, connection settings, user requests, usage statistics, soft reset count, recently used applications, memory heap (paragraph [0077]; e.g., make and model number, status of the mobile unit, etc.).

Regarding claim 6, the combination of Rignell, Marran, and Lawrence disclose the method of claim 1, in addition Rignell discloses wherein the device profile data is transmitted over-the-air using GPRS (paragraph [0089]).

Regarding claim 7, the combination of Rignell, Marran, and Lawrence disclose the method claim 1, in addition Rignell discloses wherein the device profile data is transmitted over-the-air using at least one protocol selected from the group consisting of GPRS, CDMA, UMTS, iDEN, SMS, WiFi, Bluetooth, and infrared (paragraphs [0084] and [0089]).

Regarding claim 8, the combination of Rignell, Marran, and Lawrence disclose the method of claim 1, in addition Rignell discloses wherein the correlating step comprises automatically selecting one or more solutions from among available application or firmware updates, configuration settings, problem resolutions, and user interface configurations (paragraphs [0081]-[0084]; the support information solving the problems of the mobile unit is generated on the basis of the information received from the mobile unit, and include the correct settings, updated versions of current and/or firmware modules, patches, etc., that would solve the mobile unit's problem).

Regarding claim 10, the combination of Rignell, Marran, and Lawrence disclose the method of claim 1, in addition Rignell discloses wherein the method is performed at the request of a user of the mobile device (paragraphs [0024]-[0025], and [0029] - lines 1-4).

Regarding claim 11, the combination of Rignell, Marran, and Lawrence disclose the method of claim 1, in addition Rignell discloses wherein the method is performed as a scheduled event automatically by the device agent (paragraphs [0024], [0027]-[0029], [0074]-[0076]; a

Art Unit: 2617

support request from the mobile unit may be generated at any internal event like a timer event or status check performed at regular intervals).

Regarding claim 12, the combination of Rignell, Marran, and Lawrence disclose the method of claim 1, in addition Rignell discloses wherein the method is performed at the request of a customer care center (paragraphs [0024], [0026], [0029]-lines 1-4; i.e., on request of the support location (i.e., customer care center)).

Regarding claim 13, the combination of Rignell, Marran, and Lawrence disclose the method of claim 12, in addition Rignell discloses wherein there are a plurality of mobile devices, and the customer care center performs the method for more than one mobile device substantially at the same time (paragraphs [0024], [0026], and [0030]; the support location/entity may send a message to several mobile units at the same time requesting information from the mobile units to provide the mobile units with solutions to technical problems they may have).

Regarding claim 14, Rignell discloses a mobile care framework comprising:

a customer care application (Fig. 2; i.e., remote support location/ facility 402);

a data store accessible by the customer care application (Fig. 4; paragraph [106]; i.e., database 407);

customer care application/(support location) means for communication between the customer care application and the data store (Fig. 4; paragraphs [0106], [0108]; i.e., means 406 is one or more specialized or general-purpose microprocessors coupled to database 407);

at least one device agent capable of responding to commands from the customer care application, the device agent being located within a mobile device remote from the customer care application in over-the-air communication with the customer care application and being

Art Unit: 2617

programmed to interact with the customer care application (Fig. 4; paragraphs [0102]-[0107]; the mobile unit comprises a microprocessor, i.e. device agent, to generate support request messages to communicate or interact with a remote support location/facility (i.e., customer care application), and obtain solutions from the remote location to the mobile unit problems);

wherein the customer care application is programmed; (a) to use the over-the-air connection to capture device profile data from the mobile device using the at least one device agent for correlation by the customer care application/(support location) means with a database of known issues and associated solutions in the data store to selectively forward to the at least one mobile device agent at least one solution for execution on the mobile device (paragraphs [0077]-[0085], [0101]-[0109]; the remote support location/facility receives the profile data (i.e., support message) from the mobile unit over the air, in where the message is monitored by a program that generates a solution (or support information) on the basis of the information received from the mobile unit and accessing one or more databases, subsequently the support information (i.e., solutions) generated is transmitted to the mobile unit to correct the problems; see also remarks about claim 1 above),

wherein the device profile data comprises user-specific and device-specific data (paragraphs [0038]-[0049]; the profile data contained in the support message comprises information regarding the user (i.e., user-specific data) such as hardware/physical/functional units/modules that are or have been connected, model make, etc. (paragraphs [0048]-[0049]) and information regarding the device (i.e., device-specific data) such as at least one version number of software, hardware, firmware, etc. in the communications unit (paragraphs [0044] and [0047]));

and wherein the customer care application/(support location) means identify solutions given the user-specific and device-specific data in the device profile data (p.0081-0082; p.0106; means 406 from the remote support location generates support information for the solving of the mobile unit problems (i.e., solutions) on the basis of the information comprised in the support request message received from the mobile unit).

But, Rignell does not particularly disclose wherein the support location means is an analytics engine used for identifying the solutions for the mobile device issues.

However, in the same field of endeavor, Marran teaches techniques for managing wireless digital communications subscriber's mobile, digital devices, such as digital cellular telephones by having a wireless digital communications network having the capability to download programming data over-the-air directly to a subscriber's mobile, and comprising an intelligent/expert system (i.e., analytics engine) with which the digital device communicates. The intelligent system processes complex inputs, discovers problems from the complex inputs, and formulates individualized solutions for discovered problems. Also, the intelligent system searches the wireless digital communications network for, and retrieves, the necessary data for solving the discovered problems and directly downloads the necessary data to the subscriber's mobile, digital device over-the-air (Abstract). This intelligent system improve prior art techniques for managing subscriber mobile, digital devices by downloading programming data to the devices intelligently, automatically, and on a device-by-device basis. The expert systems detects when a subscriber's digital telephone needs to be updated and decides what action to take, in order to automatically push downloads to subscriber's digital telephones, and combines a working memory with logic programming and a set of predetermined rules for triggering

Art Unit: 2617

different programming actions (col. 4, line 16 – col. 5, lines 1-11; col. 7, lines 37-45; col. 8, line 29 – col. 9, lines 1-15). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, to modify Rignell to introduce (at the support location) an analytics engine programmed to identify solutions for the mobile device issues, as suggested by Marran, since such a modification would automate the procedure of maintaining digital telephones up to date given that the analytics engine (i.e., expert system) automatically pushes downloads to subscriber's digital telephone when needed, keep pace with current changes and constantly search for recognized events and decides what particular mobile devices require provisioning, repairs, etc. (col. 4, lines 15-19; col. 5, lines 31-45; col. 8, lines 29-35, 52-56), as a result mobile digital devices are more efficiently managed.

But, the combination of Rignell and Marran does not particularly disclose wherein the customer care application matches the device profile data to a customer profile, the customer profile including a profile history.

However, Lawrence teaches a customer service system for diagnosing a problem related to the use of a wireless communication device that matches device profile data to a customer profile, the customer profile including a profile history (pages 16-17; a customer service system retrieves the customer's complete record which typically contain account, service, and complaint history information, according to a subscriber number (i.e., profile information) and looks up information that leads to a resolution of the device problem). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, to modify the combination of Rignell and Marran to include the features of wherein the customer care application matches the device profile data to a customer profile, the customer profile including a

profile history, as suggested by Lawrence, since such a modification would provide the best appropriate solution that leads to the resolution of the device problems.

Regarding claim 15, the combination of Rignell, Marran, and Lawrence disclose the mobile care framework of claim 14, in addition Rignell discloses wherein the device profile data is selected from the group consisting of configuration settings, resident applications, and diagnostic data (paragraphs [0038]-[0049], and [0077]).

Regarding claim 16, the combination of Rignell, Marran, and Lawrence disclose the mobile care framework of claim 15, in addition Rignell discloses wherein the diagnostic data comprises diagnostic data selected from the group consisting of make and model of the device, total and available memory, total and available storage, battery life, connection strength, connection settings, user requests, usage statistics, soft reset count, recently used applications, memory heap (paragraph [0077]; e.g., make and model number, status of the mobile unit, etc.).

Regarding claim 17, the combination of Rignell, Marran, and Lawrence disclose the mobile care framework of claim 14, in addition Rignell discloses wherein the device profile data is transmitted over-the-air using GPRS (paragraph [0089]).

Regarding claim 18, the combination of Rignell, Marran, and Lawrence disclose the mobile care framework of claim 14, in addition Rignell discloses wherein the device profile data is transmitted over-the-air using a protocol selected from the group consisting of GPRS, CDMA, UMTS, iDEN, SMS, WiFi, Bluetooth, and infrared (paragraphs [0084] and [0089]).

Regarding claim 19, the combination of Rignell, Marran, and Lawrence disclose the mobile care framework of claim 14, in addition Rignell discloses wherein the analytics engine is programmed to select at least one solution from among available application or firmware

Art Unit: 2617

updates, configuration settings, problem resolutions, user interface configurations (paragraphs [0081]-[0084]; the support information solving the problems of the mobile unit is generated on the basis of the information received from the mobile unit, and include the correct settings, updated versions of current and/or firmware modules, patches, etc., that would solve the mobile unit's problem).

Regarding claim 20, the combination of Rignell, Marran, and Lawrence disclose the mobile care framework of claim 14, in addition Rignell discloses wherein the device agent comprises an embedded application (Fig. 4; paragraphs [0102]-[0103]; is inherent to recognize that the microprocessor, i.e. device agent, have an embedded application in order to execute the process of transmitting profile data and updating the mobile unit with solutions).

Regarding claim 22, the combination of Rignell, Marran, and Lawrence disclose the mobile care framework of claim 14, in addition Rignell discloses wherein the customer care application comprises a customer service representative interface (paragraphs [0080], [0082], and [0094]; the remote location support/facility have a support team or person that the mobile unit user can contact for direct support).

Regarding claim 23, the combination of Rignell, Marran, and Lawrence disclose the mobile care frame work of claim 14, in addition Marran discloses wherein the analytics engine comprises a rule-based application (col. 8, lines 62-67; col. 9, lines 8-17). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, for the analytics engine to comprise a rule-based application, as taught by Marran, since it provides human expertise to a computer system.

Art Unit: 2617

4. **Claim 9** is rejected under 35 U.S.C. 103(a) as being unpatentable over RIGNELL et al. in views of MARRAN, LAWRENCE, and HOMUTH (US 2003/0195753 A1).

Regarding claim 9, the combination of Rignell, Marran, and Lawrence disclose the method of claim 1, but the combination does not particularly disclose wherein the wherein the correlating step further comprises escalating the problem to a second level customer service support bureau.

However, Homuth teaches systems and methods for priority-based customer service wherein customer may be provided with a first and second level of customer service, a second level having a higher priority of service than the first (abstract; p.0025). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention, to modify the combination to include the features of escalating the problem to a second level customer service support bureau, as suggested by Homuth, since a second level customer service provides more expertise and a higher quality of service for solving customer issues.

5. **Claim 21** is rejected under 35 U.S.C. 103(a) as being unpatentable over RIGNELL et al. in views of MARRAN, LAWRENCE, and ERIKSSON (US 2002/0178241 A1).

Regarding claim 21, the combination of Rignell, Marran, and Lawrence disclose the mobile care framework of claim 14, but the combination does not particularly disclose wherein the data store is linked to vendor and community support.

However, Eriksson teaches a management system that includes a server to store information about devices and its configurations, that when a device attempts to initiate an unknown function the server interrogates the device about settings or configuration information and if determines that the function is unknown, the sever contacts an Internet server of the

manufacturer of the device (i.e. vendor) for requesting the pertinent information about the unknown function (abstract). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention, to modify the combination to include the features of linking the data store to a vendor and community support, as suggested by Eriksson, because such a modification would provide access to off-site engines or databases to obtain all the information necessary to fully assist the mobile device.

6. **Claims 27 and 28** are rejected under 35 U.S.C. 103(a) as being unpatentable over RIGNELL et al. in views of MARRAN, LAWRENCE, and SHENFIELD (US 2004/0215830 A1).

Regarding claims 27-28, the combination of Rignell, Marran, and Lawrence disclose the method and framework of claims 1 and 14, but the combination does not expressly disclose wherein the device profile data comprises XML data and the solution forwarded comprises XML data.

However, exchanging data using eXtensible Markup Language (XML) is well known in the art and Shenfield is evidence of the fact. Shenfield teaches that eXtensible Markup Language (XML) is quickly becoming the most common schemes for exchanging data between different computer systems and can be used on over-the-air applications (paragraphs [0004], [0006], and [0044]). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, to modify the combination to include the features of wherein the device profile data comprises XML data and the solution forwarded comprises XML data, as suggested by Shenfield, because eXtensible Markup Language (XML) is quickly becoming the most common schemes for exchanging data between different computer systems.

7. **Claims 24-26** are rejected under 35 U.S.C. 103(a) as being unpatentable over RIGNELL et al. in views of LAWRENCE.

Regarding claim 24, Rignell discloses a device agent embedded in a mobile device capable of communicating over-the-air with a customer care application within a mobile care framework to provide device profile data relevant to the mobile device (paragraphs [0077]-[0078], and [0102]-[0103]; the mobile unit has means for generating a support request message containing device profile data [e.g., unit settings/parameters, soft-, hard- and firmware modules, unit identification, etc.]), comprising user-specific and device-specific data (paragraphs [0038]-[0049]; the profile data contained in the support message comprises information regarding the user (i.e., user-specific data) such as hardware/physical/functional units/modules that are or have been connected, model make, etc. (paragraphs [0048]-[0049]) and information regarding the device (i.e., device-specific data) such as at least one version number of software, hardware, firmware, etc. in the communications unit (paragraphs [0044] and [0047])), including identifying information (paragraph [0077]; i.e., unit identification); and

programmed to receive and execute at least one solution selectively forwarded over-the-air by the customer care application (paragraphs [0080]-[0081], and [0084]-[0085]; the mobile unit receives an SMS with support information from the support location and is programmed to automatically update with some of the correct settings, updates, patches, etc. received from the support location),

the device agent being programmed for capturing the device profile from the mobile device (paragraph [0077]-[0078], and [0102]-[0103]; the mobile unit has means, i.e.,

Art Unit: 2617

microprocessor/device agent, which inherently captures the profile data to include it in the support request message), and

executing the at least one solution on the mobile device (paragraphs [0031], [0081]-[0085], and [0093]; the mobile unit automatically updates its settings and parameters with the solution received from the remote support location; it is implied that a component in the device such as the microprocessor implements these new settings),

the at least one solution being based on the user-specific and device-specific profile data (paragraphs [0081]-[0082], and [0106]; the remote support location generates support information for the solving of the mobile unit problems (i.e., solutions) on the basis of the information comprised in the support request message received from the mobile unit, the support request message comprises user-specific and device-specific data).

But, Rignell does not particularly disclose wherein the identifying information enables the customer care application to match the device profile data to a customer profile, including a profile history.

However, Lawrence teaches a customer service system for diagnosing a problem related that uses identifying information to match the device profile to a customer profile, including a profile history (pages 16-17; a customer service system retrieves the customer's complete record which typically contain account, service, and complaint history information, according to a subscriber number (i.e., profile information) and looks up information that leads to a resolution of the device problem). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, to modify Rignell to include the features of wherein the identifying information enables the customer care application to match the device profile data to

a customer profile, including a profile history, as suggested by Lawrence, since such a modification would provide the best appropriate solution that leads to the resolution of the device problems.

Regarding claim 25, the combination of Rignell and Lawrence disclose the device agent of claim 24, in addition Rignell discloses wherein the device agent comprises a user prompt to provide device profile data to the customer care application and receive and execute solutions (paragraph [0076]; the mobile unit is provided with a menu item (i.e. user prompt) that the user selects to execute a test to determine if a support message should be sent and upon an affirmative response a support message request is generated).

Regarding claim 26, the combination of Rignell and Lawrence disclose the device agent of claim 24, in addition Rignell discloses wherein the device agent comprises a scheduler for timing scheduled provision of device profile data to the customer care application and receiving and executing solutions (paragraphs [0024], [0027]-[0029] and [0074]-[0076]; a support request from the mobile unit may be generated at any internal event like a timer event or status check performed at regular intervals within the mobile unit).

8. **Claim 29** is rejected under 35 U.S.C. 103(a) as being unpatentable over RIGNELL et al. in views of LAWRENCE and SHENFIELD.

Regarding claims 29, the combination of Rignell and Lawrence disclose the device agent of claim 24, but the combination does not expressly disclose wherein the device profile data comprises XML data and the solution forwarded comprises XML data.

However, exchanging data using eXtensible Markup Language (XML) is well known in the art and Shenfield is evidence of the fact. Shenfield teaches that eXtensible Markup Language

Art Unit: 2617

(XML) is quickly becoming the most common schemes for exchanging data between different computer systems and can be used on over-the-air applications (paragraphs [0004], [0006], and [0044]). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention, to modify the combination to include the features of wherein the device profile data comprises XML data and the solution forwarded comprises XML data, as suggested by Shenfield, because eXtensible Markup Language (XML) is quickly becoming the most common schemes for exchanging data between different computer systems.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marisol Figueroa whose telephone number is (571) 272-7840. The examiner can normally be reached on Monday Thru Friday 8:30 a.m. - 5:00 p.m.

Art Unit: 2617

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester G. Kincaid can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Marisol Figueroa
Art Unit 2617


JOSEPH FEILD
SUPERVISORY PATENT EXAMINER